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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/555,859

11/17/2006

Fabio Amiconi

102792-501 (11233P6 US)

4456

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NORRIS, MCLAUGHLIN & MARCUS  
875 THIRD AVE  
18TH FLOOR  
NEW YORK, NY 10022

EXAMINER

STANLEY, JANE L

ART UNIT

PAPER NUMBER

4145

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/555,859	<b>Applicant(s)</b> AMICONI ET AL.	
	<b>Examiner</b> JANE L. STANLEY	<b>Art Unit</b> 4145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>20051107</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Oath/Declaration***

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:  
It does not state that the person making the oath or declaration acknowledges the duty to disclose to the Office all information known to the person to be material to patentability as defined in 37 CFR 1.56.

The present oath/declaration indicates 37 CFR 1.56(a) not 37 CFR 1.56.

### ***Claim Objections***

2. **Claim 5** is objected to because of the following informalities: the claim states "wherein at least one" and should instead read "wherein the at least one" or "wherein said at least one". Appropriate correction is required.

3. **Claim 21** is objected to because of the following informalities: the claim states "containing a composition according to claim 1" and should instead read "containing the composition". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claims 1-24** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

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applicant regards as the invention. The term "water-softening active" in claims 1 and 22, as well as in claims 2-21 and 23-24 which depend from claim 1, is unclear which renders the claim indefinite. The term "water-softening active" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For the purposes of this office action, the examiner interprets the term "water-softening active" to mean a "water-softening agent".

6. **Claim 8** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 8 recites the limitation "the acid water-softening active" in line 2 of the claim. As claim 1, from which claim 8 depends, does not include the limitation wherein the "water-softening active" is an acid, there is insufficient antecedent basis for this limitation in the claim. For the purpose of furthering prosecution, the Examiner is considering claim 8 to depend from claim 4 and not claim 1.

7. **Claim 9** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 9 depends from claim 8, which specifies "the acid water-softening active is partially neutralized," whereas claim 9 specifies "the acid water-softening active that is neutralized." It is unclear if Claim 9 is meant to further narrow

claim 8 by requiring the acid water softening active to now be fully neutralized or if this is the result of a typographical error.

8. **Claim 23** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 23 recites the limitation "a container according to claim 19" in the first line of the claim. As claim 19 does not comprise a container nor does claim 1, from which it depends, there is insufficient antecedent basis for this limitation in the claim. For the purpose of furthering prosecution, the Examiner is considering claim 23 to depend from claim 21 and not claim 19.

9. **Claim 24** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 24 recites the limitation "a container according to claim 21 wherein the water-soluble polymer..." in line 2 of the claim. As claim 21 does not include a water-soluble polymer nor does claim 1, from which it depends, there is insufficient antecedent basis for this limitation in the claim. For the purpose of furthering prosecution, the Examiner is considering claim 24 to depend from claim 23 and not claim 21.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. **Claims 1, 3, 5-7, 14-15, and 17-24** are rejected under 35 U.S.C. 102(b) as being anticipated by Duffield (GB 2374830).

**Regarding claim 1**, Duffield teaches liquid (pg 13, ln 23) water-softening (pg 12, ln 13; pg 13, ln 15) compositions comprising: a) at least one water-softening active (carboxylates, pg 18, ln 28; citric acid, pg 19, ln 30; polymers, pg 20, ln 4-8); and b) an organic solvent (C<sub>1</sub>-C<sub>3</sub> alcohols, i.e. ethanol, pg 20, ln 23-24); said composition containing less than 35 wt% water (anhydrous or at least 5 wt% free water, pg 13, ln 24-25).

**Regarding claims 3, 5-7, 14-15, 18 and 20**, Duffield teaches all the claim limitations as set forth above and further teaches a water-softening composition:

- wherein the at least one water-softening active is a carboxylic acid (carboxylate and or the corresponding free acids, pg 19, ln 24-27) (**claim 3**);
- wherein at least one water-softening active is a water-softening polymer (polymers, pg 20, ln 4-8) (**claim 5**);
- wherein the water-softening polymer is a polycarboxylic acid polymer (polyacrylic acid, pg 20, ln 6) (**claim 6**);

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- wherein the polycarboxylic acid polymer is a polyacrylic polymer (e.g. polyacrylic acid and polyacrylic/polymaleic polymers, pg 20, ln 6-7) (**claim 7**);
- which contains less than 15wt% of free water (anhydrous or at least 5 wt% free water, pg 13, ln 24-25) (**claim 14**);
- wherein the composition is anhydrous (anhydrous, pg 13, ln 24) (**claim 15**);
- which contains a monomeric polycarboxylic acid (citric acid, pg 19, ln 30) (**claim 18**);
- wherein the monomeric polycarboxylic acid is citric acid (citric acid, pg 19, ln 30) (**claim 20**).

**Regarding claim 17**, Duffield teaches all the claim limitations as set forth above. While Duffield teaches a water-softening composition with a pH of 7-9 (pg 21, ln 4-5), not taught is a water-softening composition wherein the pH when measured as a 5%wt solution in deionized water at 20°C is less than 9. While Duffield does not teach the pH of the composition being measured as a 5%wt solution in deionized water at 20°C, since the composition disclosed is the claimed water-softening composition it is inherent, absent an objective showing to the contrary, that the composition of Duffield would have this property, a pH of less than 9, were it to be measured under the same conditions.

**Regarding claim 19**, Duffield teaches all the claim limitations as set forth above. Duffield, however, does not disclose the composition as having a viscosity of 500 to 1,000,000cps measured using a Brookfield viscometer with spindle S31 at 12 RPM and

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20°C. While Duffield does not teach the viscosity of the composition being measured using a Brookfield viscometer with spindle S31 at 12 RPM and 20°C, since the composition disclosed is the claimed water-softening composition it is inherent, absent an objective showing to the contrary, that the composition of Duffield would have this property, a viscosity of 500 to 1,000,000cps.

**Regarding claims 21 and 23-24**, Duffield teaches all the claim limitations as set forth above and further teaches:

- a water-soluble container containing a composition according to claim 1 (see above) (**claim 21**);
- a container which comprises a thermoformed (pg 3, ln 21-23) water-soluble polymer (poly(vinyl alcohol), pg 4, ln 28-31) (**claim 23**);
- a container wherein the water-soluble polymer is a poly (vinyl alcohol) (poly(vinyl alcohol), pg 4, ln 28-31) (**claim 24**).

**Regarding claim 22**, Duffield teaches a water-soluble container (pg 3, 23; pg 4, ln 18-21) containing a liquid water-softening composition (pg 12, ln 13; pg 13, ln 15) comprising: a) at least one water-softening active (carboxylates, pg 18, ln 28; citric acid, pg 19, ln 30; polymers, pg 20, ln 4-8); b) an organic solvent (C<sub>1</sub>-C<sub>3</sub> alcohols, i.e. ethanol, pg 20, ln 23-24); c) an electrolyte (pg 9, ln 5); and said composition containing greater than 35 wt% water (less than 80 wt%, pg 13, ln 27; or at least 10 wt%, pg 13, ln 25).



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12. **Claims 1-2, 4, 8-13 and 16** are rejected under 35 U.S.C. 102(b) as being anticipated by Lee *et al.* (US PGPub 2001/006936).

**Regarding claim 1**, Lee *et al.* teaches liquid cleaning compositions (Table 1, [0026]) comprising: a) at least one water-softening active (EDTA, [0016]; EDTA ammonium salts and/or ammonium citrate, [0021]); and b) an organic solvent (e.g. propylene glycol, [0020], In 4-5); said composition containing less than 35 wt% water (Table 1).

**Regarding claims 2, 4, 8-13 and 16**, Lee *et al.* teaches all the claim limitations as set forth above and further teaches a composition:

- wherein the at least one water-softening active is an acid (citric acid, Table 1) (**claim 2**);
- wherein the acid is partly neutralized (citric acid and alkanolamine, Table 1; EDTA and alkanolamine, Table 1) (**claim 4**);
- wherein the acid water-softening active is partly neutralized by an organic base (citric acid and alkanolamine, Table 1; EDTA and ammonia, [0016], In 12-15; EDTA and alkanolamine, Table 1) (**claim 8**);
- wherein the acid water-softening active that is neutralized is citric acid (ammonium citrate, [0021], In 3-4; citric acid and alkanolamine, Table 1) (**claim 9**);
- wherein the organic base is an alkanolamine (e.g. monoethanolamine, [0019], In 1-3) (**claim 10**);
- in which the alkanolamine is monoethanolamine, diethanolamine or triethanolamine ([0019], In 1-3) (**claim 11**);

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- wherein the organic solvent is a glycol (propylene glycol, [0020], In 4-5) (**claim 12**);
- wherein the organic solvent monopropylene glycol ([0020], In 4-5) (**claim 13**);
- which comprises from 10 to 70 wt% of organic solvent (25% to 75% by weight, [0016]. In 6) (**claim 16**).

While Lee *et al.* does not teach a composition specifically for use as a water-softener, the compositions that are taught by Lee *et al.* include the use of compounds that are known in the art to function as water-softeners (i.e. EDTA, citric acid, etc.) and so it is inherent that said compositions would function in the same capacity with a reasonable expectation of success absent an objective showing to the contrary. As such, the composition(s) as taught by Lee *et al.* anticipate the applicant's claimed invention.

### **Conclusion**

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JANE L. STANLEY whose telephone number is (571)270-3870. The examiner can normally be reached on Monday - Friday, 7:30 am - 5:00pm, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Basia Ridley can be reached on (571) 272-1453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JLS

/Gwendolyn Blackwell/  
Primary Examiner, Art Unit 1794